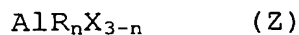


CLAIMS

1. A carrier component suitable as an olefin polymerization catalyst, which is insoluble in a hydrocarbon solvent, is in the form of solid fine particles having an average particle diameter of 3 to 80 μm , and contains a magnesium atom, an aluminum atom and a C_{1-20} alkoxy group simultaneously, wherein the molar ratio of magnesium atom to aluminum atom (Mg/Al) is in the range of 1.0 to 300, and the molar ratio of alkoxy group to aluminum atom (alkoxy group/ Al) is in the range of 0.05 to 2.0.

2. The carrier component according to claim 1, wherein the molar ratio of magnesium atom to aluminum atom (Mg/Al) is in the range of 40 to 150, and the molar ratio of alkoxy group to aluminum atom (alkoxy group/ Al) is in the range of 0.2 to 2.0.

3. The carrier component according to claim 1 or 2, which is obtained by contacting a magnesium halide with a C_{1-20} alcohol and then contacting the product with an organoaluminum compound represented by the general formula (Z):



wherein R represents a C_{1-20} hydrocarbon group, X represents a halogen atom or a hydrogen atom, n is an integer of 1 to 3, and when there are a plurality of Rs, Rs may be the same or different, and when there are a plurality of Xs, Xs may be the same or different.

4. An olefin polymerization catalyst comprising the carrier component described in any one of claims 1 to 3.

5. The olefin polymerization catalyst according to claim 4, which comprises (A) a transition metal compound in the groups 3 to 11 in the periodic table, having a ligand containing two or more atoms selected from a boron atom, a nitrogen atom, an oxygen atom, a phosphorus atom and a sulfur atom, (B) the carrier component described in any one of claims 1 to 3, and (C) a specific organometallic compound if necessary.

6. The olefin polymerization catalyst according to claim 4 or 5, wherein the transition metal compound (A) is carried on the carrier component (B) described in any one of claims 1 to 3.

7. A polyolefin having a bulk density of $0.20 \text{ (g/cm}^3\text{)}$ or more, which is obtained by homopolymerizing or copolymerizing an olefin in the presence of the olefin polymerization catalyst described in any one of claims 4 to 6.